**INTERNATIONAL ELECTROTECHNICAL COMMISSION SCHEME FOR  
CERTIFICATION TO STANDARDS RELATING TO EQUIPMENT FOR USE  
IN EXPLOSIVE ATMOSPHERES (IECEx SYSTEM)**

**Title: Re-assessment Report for TÜV Rheinland, Germany as an Accepted Ex Certification Body (ExCB) for the IECEx 05 Certificate of Personnel Competence Scheme (CoPC)**

**Circulated to: IECEx Management Committee, ExMC**

**Introduction**

In accordance with the 5 year re-assessment plan for the surveillance and monitoring of bodies within the IECEx System, the following document contains the IECEx Re-assessment Report for the continued acceptance of TÜV Rheinland, Germany, as an Accepted Ex Certification Body (ExCB) for the IECEx 05 Certificate of Personnel Competence Scheme (CoPC).

This report is hereby submitted for endorsement during the ExMC 2019 Meeting being held in Dubai.

**Chris Agius**

Chris Agius

**IECEx Secretariat**

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|  | ASSESSMENT REPORT |
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| **BODY UNDER ASSESSMENT:** | TÜV Rheinland Industrie Service GmbH  Am Grauen Stein  D – 51105 Köln  Germany |
| **SITE(S)**  **ASSESSED:** | TÜV Rheinland Industrie Service GmbH  Am Grauen Stein  D – 51105 Köln, Germany |

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| **IECEx SITE ASSESSMENT TEAM:** | Mr Ralph Wigg – Lead Assessor |
| **REPRESENTATIVE/S OF BODY:** | Mr Klauspeter Graffi  Mr Marc Krugmann  Mr Christian Mehrhoff |
| **DATE(S) OF SITE ASSESSMENT:** | 12th September 2018 |

**IECEx 05 Certificate of Personnel Competency Scheme**

**ASSESSMENT REPORT of**

**NEW IECEx APPLICANT BODY EXISTING IECEx CERTIFICATION BODY**

**X**

**(ExCB)**

Top of Form

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| **ASSESSMENT TYPE:** | **ATTACHMENTS** | **No. of Pages** |
| Application: |  |  |
| Surveillance: |  |  |
| Re-Assessment: |  |  |
| Other: |  |  |
| Assessment duration: | 1 Day on-site 12th September 2018 plus pre and post off-site assessments |  |
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| **RECOMMENDATION BY IECEx ASSESSOR(S)**  (Select one item only) | That Acceptance be granted  That Acceptance be withheld/suspended  That Acceptance continues  That Acceptance be granted/continued conditional on Non-Compliance/Matters raised, having agreed corrective action and time scales to rectify the System within and agreed time agreed by the Assessors | |

# TÜV Rheinland Industrie Service GmbH Scope Assessed

TÜV Rheinland Industrie Service GmbH have been assessed according to the requirements of IECEx05 – Certification of Personnel Competencies [CoPC] for the following Units of Competency:

Unit Ex 000 – Basic knowledge and awareness to enter a site that includes a classified hazardous area.

Unit Ex 001 – Apply basic principles of protection in explosive atmospheres

Unit Ex 002 – Perform classification of hazardous areas

Unit Ex 003 – Install explosion-protected equipment and wiring systems

Unit Ex 004 – Maintain equipment in explosive atmospheres

Unit Ex 005 – Overhaul and repair of explosion-protected equipment

Unit Ex 006 – Test electrical installations in or associated with explosive atmospheres

Unit Ex 007 – Perform visual & close inspection of electrical installations in or associated with explosive atmospheres

Unit Ex 008 – Perform detailed inspection of electrical installations in or associated with explosive atmospheres

Unit Ex 009 – Design electrical installations in or associated with explosive atmospheres

Unit Ex 010 – Perform audit inspection of electrical installations in or associated with explosive atmospheres

Bottom of Form

**SECTION 1. GENERAL INFORMATION**

* 1. **Name of Body:**

TÜV Rheinland Industrie Service GmbH

Am Grauen Stein

D – 51105 Köln

Germany

* 1. **CURRENT IECEx PARTICIPATION:**

TÜV Rheinland Industrie Service GmbH is an existing ExCB and ExTL for the following IECEx Schemes:

IECEx Certified Equipment Scheme (IECEx 02)

IECEx CoPC Scheme (IECEx 05)

* 1. **DETAILS OF ASSESSMENT TEAM:**

Mr Ralph Wigg – IECEx Assessment Team Leader (AU)

* 1. **DATES OF ASSESSMENT:**

The on-site assessment visit was conducted on 12th September 2018 plus off-site assessments both prior and following the on-site visit.

* 1. **LOCATION OF ASSESSMENT:**

The TÜV Rheinland Industrie Service GmbH location as stated in 1.1 above.

* 1. **TÜV Rheinland Industrie Service GmbH RESOURCES FOR IECEx 05 CERTIFICATION ACTIVITIES:**

The Assessment team have re-assessed and verified the availability of competent technical staff, support staff and facilities to undertake the full scope of IECEx 05 certification activities for all units Ex 000 to Ex 010.

**SECTION 2. ASSESSMENT - SUMMARY OF RESULTS**

| **IECEx CoPC SCHEME REQUIREMENTS** | | | **Findings** | **COMMENTS AND REFERENCE TO ATTACHMENTS** |
| --- | --- | --- | --- | --- |
| **IECEx 05 requirements** | Confirmation of Scope of IECEx Acceptance or scope of application, (for new applicant) | | COMPLIES | TÜV Rheinland Scope cross refers to the Scope of IECEx05 and has embraced all competencies as given in OD504 associated with Units Ex 000 to Ex 010 |
| Confirmation that details in original application are still current (for new application) | | Not Applicable | N/A as this is a re-assessment. |
| Confirm currency and scope of accreditation (ISO/IEC 17024) applicable | | COMPLIES | At the initial assessment TÜV Rheinland held Deutsche Akkreditierungsstelle GmbH [DAkkS] accreditation to ISO/IEC 17024. TÜV Rheinland no longer hold this accreditation (since 2014) therefore assessment for compliance with ISO/IEC 17024 was undertaken as part of this re-assessment. It is also noted that TÜV Rheinland no longer satisfy Clause 1 of OD501 and will revert to the 2.5 year surveillance assessment according to Clause 2  Compliance is verified. |
| Clause 9.1 | (a) in a participating country | COMPLIES | Germany is a participating country in the IECEx System |
| (b) operate recognized certification scheme | COMPLIES | TÜV Rheinland participate in the IECEx Equipment Certification Scheme and operate as a Notified Body under the ATEX Directive |
| (c) competence demonstrated by assessment | COMPLIES | IECEx Assessment included a review of TÜV Rheinland staff records for competence to evaluate to OD 504 for Units Ex000 to Ex010.  No additions since the previous assessment and all staff were found to be competent. |
| Assessment facilities considered by Assessment team to be appropriate and adequate for assessment of Units, according to OD 504? | | COMPLIES | The TÜV Rheinland Competence Procedures define the requirements for the knowledge skills assessment and examination requirements.  These have been previously assessed and this re-assessment has found them appropriate and adequate.  In addition, TÜV Rheinland have outsourced some of the candidate assessments and the agreement and procedure was not found to be acceptable and **constitutes a major non-conformance**. Each of the assessments in question have been completely reworked to the satisfaction of the Lead Assessor. See body of report for additional detail. |
| Confirmation of which location is the official ExCB location, where more than 1 location is identified?  an official ExCB location is one where the following are conducted:   * applications received, * contract review (review of application) * assignment of application to ExCB staff * review of exam/assessments * decision to issue Certificate   (Contact IECEx Secretary for any questions) | | Not Applicable | TÜV Rheinland Industrie Service GmbH, Am Grauen Stein, D – 51105 Köln, Germany, is confirmed as the official ExCB location together with the examination facilities also at this location. |
| **ISO/IEC 17024 Assessment**–Satisfactorily Completed (for bodies without acceptable national Accreditation) | | | COMPLIES | TÜV Rheinland Industrie Service GmbH are operating to ISO/IEC 17024:2003.  The ISO/IEC 17024 TÜV Rheinland procedures, including updates since the previous assessment, were reviewed.  Evidence provided generally demonstrated compliance with some comments and minor non-conformances as listed in this report which have been resolved to the satisfaction of the Lead Assessor.  TÜV Rheinland advised that they cannot seek National Accreditation for ISO/IEC 17024 but will rely on the IECEx assessments. The National Accreditation for ISO/IEC 17024 is not offered within the DAkkS scope. |

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| **IECEx Operational Document**  **Requirements** | **OD502** | COMPLIES | No change from the original assessment |
| **OD 503** | COMPLIES | TÜV Rheinland are operating to Issue 4.1 of OD 503. It was noted that TÜV Rheinland have retained the 80% pass mark - see additional remarks below. |
| **OD 504**  (Review of ExCB assessment criteria including question bank, mapped against Competency Units of OD 504) | COMPLIES | TÜV Rheinland had originally intended to use the IECEx Question Databank but this is not yet available. They have since developed their own question bank for all Units Ex 001 to Ex 010.  At initial assessment these were found to be incomplete in a number of Units. Following additional work by TUV Rheinland, these assessments have been subject to a re-submission and are now verified as acceptable. |

**Additional Remarks concerning requirements** (if any)

*ISO/IEC 17024 compliance.*

At the initial assessment in 2013 a Dakks report was table which covered the aspects general to 17020, 17021, 17024, 17025 EN45011 (Guide 65) and in addition individual aspects per ISO/IEC standard. However since acceptance the situation at TÜV Rheinland has changed and TÜV Rheinland now do not hold accreditation to ISO/IEC 17024 and are now subjected to the 2.5 year re-assessment, as a result assessment to ISO/IEC 17024 was undertaken during this re-assessment.

TÜV Rheinland assessments in future will need to be conducted on the basis that they do NOT have National accreditation to ISO/IEC17024, and procedures will be in Document MS-3098. The referenced documents are only available in German and copies will be required in English which is to be verified at the next assessment.

*Re-assessment*

During the re-assessment the compliance with TÜV Rheinland Policies and Procedures was checked. A number of comments and recommendations were made for updates to Document PB3.105

TÜV Rheinland have opted to retain the original 80% pass rate rather than implement the 75% pass rate according to the latest edition of OD503.

In the period from June 2016 to June 2018 121 CoPCs were issued and a total 5 assessments selected at random were reviewed in detail to verify that all procedures had been followed and assessments had been correctly undertaken.

The assessment findings indicated that TÜV Rheinland had outsourced some of the assessments, not in line with the requirements of IECEx with the assessment of documentation raising questions over the certification review of these assessments as to whether they were adequately completed. This constituted a major non-conformance and required that TÜV Rheinland to ensure they conducted a new full certification review of those affected making sure that all the required documentation was available. This has been completed to the satisfaction of the assessor.

Other observations resulted in amendments to both Documents PB 3.105, QMA 3.105.01 QMA 3.105.02 and Flow Chart PB 3.105-A1 to cover language translations, reference to EU Directive rather than IECEx, re-certification and a lack of record of assessor appointment criteria.

It is noted that TÜV Rheinland have introduced a new document control system [ETQ] which replaces the older [Blue Eye] system.

*Assessor interviews*

No additional assessor interviews were conducted as there was no addition to the assessor list.

*General comments*

Unit 000 has been included in the TÜV Rheinland scope.

*Notes from files reviewed*

Noted that some of the examinations were conducted in Korean and there was no translation or second person to verify. At the time of the site assessment visit, it was found that not all documentation used in the Certification Review could be located. At the time of the site assessment visit, the filing system (electronic) was identified as ‘cumbersome’, especially for examinations in Korea, it was agreed at the time that this should be rectified. Most files selected for review were in a similar condition. Amendments to TÜV Rheinland procedures are considered to address this shortcoming.

# Conclusion of the Assessment and Recommendations of the Assessment Team

The purpose of the site assessment was to verify compliance with the requirements of the IECEx Scheme for the initial and on-going acceptance of an Ex Certification Body (ExCB). The site assessment forms part of the overall evaluation of the body by the IECEx Management Committee, ExMC and was conducted in accordance with the IECEx Scheme Assessment Procedures, IECEx OD 501. Report of the on-site assessment team is as follows:

The Assessment Team findings confirm that TÜV Rheinland has Policies, Procedures and Operational requirements in place that verify compliance with IECEx CoPC Scheme Rules and Operational Documents which include the requirements of ISO/IEC 17024. It was noted that a number of modifications were required to Documents PB 3.105, QMA 3.105.01 QMA 3.105.02 and Flow Chart PB 3.105-A1 to ensure compliance with the latest editions of the rules and operation documents. These changes have been issued, reviewed and found acceptable to the assessor.

The non-conformances relating to the accreditation to ISO/IEC 17024 and the outsourcing have been addressed, found acceptable to the assessor and closed out.

The re-assessment verified the operation is generally compliant with both the Policies and Procedures of the ExCB and also operating according to the requirements of the IECEx05 CoPC Scheme. The focus of this re-assessment was on the review of policies & procedures requirements for ISO/IEC 17024, IECEx05 and ODs 502, 503 & 504.

Based on the findings and details given in the Assessment Team recommend TÜV Rheinland continue as an accepted CoPC ExCB within the IECEx System. As TÜV Rheinland do not have National Accreditation according to ISO/IEC 17024 they will be subject to a surveillance assessment in 2.5 years according to OD 501 Cl 2.2.

R. Wigg

**IECEx Assessment Team Leader**

**17 May 2019**